Date: July 22, 1988

Subject: PRP Meeting of July 21, 1988

From: James F. Pendergast

Superfund Enforcement Section (6H-EE)

To: South Cavalcade files

On July 21, 1988, the Koppers Company met with EPA to discuss issues of the draft Feasibility Study report. Representing Koppers were Shannon Craig and David Morgan of Keystone and Paul Anderson of ERT. Representing EPA were Jim Pendergast and Lynn Mays, Jeff Saunders, and Clyde Burnett of CDM. The topics discussed are discussed below.

SURFACE AND SURFICIAL SOILS

I presented why soils need to be addressed in the FS report. First, Koppers cannot quantify the actual risk to commercial occupants because of limited data. Therefore, some soil remedial method needs to be elected if later sampling shows a potential risk. Second, the treatability tests show a potential for continued leaching.

I also explained that the soils now under the re-inforced concrete can be considered as fundamentally different from soils accessible. The soils under the concrete do not present a risk except for short-term exposure to utility workers. The concrete offers an impervious barrier which will prevent continued leaching. Remediating the soils under the concrete would also disrupt site businesses. I told Kappers that this had been discussed with EPA management.

Koppers explained that they believe that the contaminants would adsorb onto the spils, but that they also could not explain the results of the treatability test. Therefore, they agreed, subject to their management's approval, to add soil remediation to the FS report.

GROUNDWATER

Koppers presented their interpretation of groundwater migration. They explained that they could not show no further migration because they cannot model slickenslides. They believe that remediation now would prevent migration and preclude exposure to contaminated drinking water in lower aquifers.

I explained that because migration could occur, the upper aquifers need to be cleaned to MCLs for metals and benzene, and no detection for carcinogenic PAHs. I explained that this was the rationale for the North Cavalcade site. Koppers tentavely agreed as long as treatment to parts per trillion was not required. I explained that parts per billion were used for North Cavalcade.

MEMORANDUM

We reviewed the Koppers modeling method for the abandoned well, and found that it was reasonable as long as they use an appropriate value for dispersivity. Jeff Saunders of CDM suggested some literature sources for this model input. I explained to Koppers that they would need to show no carcinogenic PAHs exceeding 30 ng/l using the model to be able to prove to EFA that the 500' aquifer does not need to be monitored. If they could not do this, then they would need to either agree to long-term manitoring or conduct another RI and FS for a separate operable unit. Koppers will resolve this in the next week.

METALS

Koppers will believes that the metals in the groundwater were anomolous, especially the maximum values. I explained that metals were found in several wells at levels exceeding the South and North Cavalcade site backgrounds. Therefore, EPA will require metal remediation. Koppers stated that they felt the oil/water separation will remove most metals, but will add a physical method (coagulation and filtering) to cost out metal treatment.

RISK

I explained that, from the available data, I didn't feel that risk could be quantified, especially the risk to future residents. Koppers agreed and would properly discuss this uncertainty in the risk assessment. We also discussed the construction worker scenario and agreed that a longer period of exposure is needed.

We also discussed the way to discuss risk from exposure to groundwater. We agreed that Koppers could not quantify risk because they could not model the migration of groundwater.

FOLLOW UP

By the end of next week, Koppers will add the soils alternatives from the Texarkana site to the FS, will use the groundwater volume including the aqueous phase contaminants to cost out the groundwater alternatives, and will finish the 500' aquifer analysis. I will travel to Pittsburgh to review this work; Jeff Saunders of CDM will assist with the review of the model.